

REMARKS

Claims 30-35, 39, 42-44, and 47-96 are pending in the application. Claims 1-29, 36-38, 40-41, and 45-96 have been cancelled. Claims 63-96 were subjected to a restriction requirement and have been cancelled without prejudice in view of the applicants' intention to file a divisional application. Further, claims 30-35, 39, 42-44, and 47-62 have been allowed. Claim 30 has been amended. No new matter has been introduced by the amendment.

Claim 30

Claim 30 has been amended to recite that the second species of gaseous compounds is introduced substantially within or in proximity to the confinement layer. The applicants assert that this amendment is necessary in order for claim 30 and dependent claims 31 and 32 to be in proper form. Support for the amendment can be found in the applicants' specification, for example, on page 6, lines 23-32, page 21, lines 24-35, and page 22, lines 1-15.

In the applicants' Preliminary Amendment submitted September 23, 2003, claim 30 recited a step of "treating the substrate so as to introduce a dose of said gaseous compounds in the substrate, at a mean depth substantially within or at the vicinity of the confinement layer." Claim 30 was rejected over U.S. Patent No. 5,374,564 to Bruel and for obviousness-type double patenting over U.S. Patent No. 6,756,286 to Moriceau et al. In response to this rejection, the applicants submitted a terminal disclaimer and amended claim 30. One of the changes introduced a step of implanting a second species in order to distinguish the two separate implant steps recited in claim 30. Following the amendment, claim 30 recited "introducing the second species of gaseous compounds into the substrate, at a mean depth substantially within the confinement layer." Thus, the amendment removed the phrase "or at the vicinity of" from the claim. The applicants assert that claim 30 now requires further amendment as set forth above in order to maintain consistency with dependent claims 31 and 32.

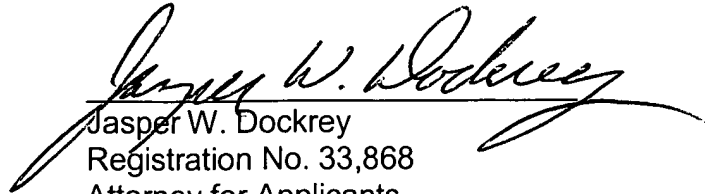
Dependent claim 31 recites that the second species of gaseous compounds is implanted "into the substrate at a mean depth of penetration corresponding to a depth of the confinement layer." Further, dependent claim 32 recites "implanting the second species of gaseous compounds into the substrate at a mean depth of penetration close to the confinement layer." By removing "or at the vicinity of" from claim 30, claims 31 and 32 are indefinite because it is not clear how the implant can be "corresponding to the mean depth," as recited in claim 31, or "close to the confinement layer" as recited in claim 32 and be "substantially within" the confinement layer. The applicants respectfully request entry of the amendment of claim 30, so that claims 31 and 32 will be in proper form by further describing the location of the second species with respect to the confinement layer.

The applicants assert that the amendment does not alter the allowability of claim 30 over Bruel. The process recited in amended claim 30 is not suggested or disclosed by Bruel. In contrast to the applicants' claimed process, Bruel discloses a process that includes implanting a gaseous species into a wafer of semiconductor material. A stiffener is then brought in contact with the implanted face of the wafer. Next, a heat treatment is carried out to cause a crystalline rearrangement in the implanted wafer. Thus, Bruel does not suggest or disclose a process in which a buried confinement layer is formed by a first species of gaseous compounds, followed by introducing a second species of gaseous compounds into a substrate within or in proximity to the confinement layer.

The applicants have made a novel and non-obvious contribution to the art of processing techniques for the formation of thin films. The claims at issue distinguish

over the cited references and are in condition for allowance. Accordingly, such allowance is now earnestly requested.

Respectfully submitted,


Jasper W. Dockrey
Registration No. 33,868
Attorney for Applicants

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200